

REMARKS

This paper is submitted in response to the final Office Action mailed on July 13, 2005. Because this amendment is submitted with a certificate of mailing in compliance with 37 C.F.R. §1.8 on or before the shortened statutory period for reply set to expire on October 13, 2005, this amendment is timely filed. Moreover, because this application is submitted within two (2) months of the mailing of the above-identified final Office Action, i.e., on or before **September 13, 2005**, Applicants are entitled to an Advisory Action issued prior to the expiration of the shortened statutory period for reply.

I. STATUS OF AMENDMENT

Claims 1 to 22 and 24 to 42 are pending in this application. Claims 1 to 22, 24 to 26 and 28 to 42 are indicated to be allowed. By this response, no pending claims have been amended, no new claims have been added and claim 27 remains at issue. Applicants submit that no additional claim or petition fees are required in connection with this application. However, please charge **Deposit Account No. 02-1818** for any insufficiency of payment, excluding the issue fee, during the prosecution of this application.

II. CLAIM REJECTIONS

The final Office Action rejects claim 27 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,115,230 ("*Voigts*") in view of U.S. Patent No. 6,477,021 ("*Haun*").

A. REJECTION UNDER 36 U.S.C. §103(a)

Applicants respectfully traverse the rejection of claim 27 as obvious¹ over *Voigts* in view of *Haun*. In particular, contrary to the relied upon characterization, none of the cited references discloses or even suggest a method or apparatus that establishes a current threshold based on an airflow setting as recited in claim 27. For example, *Voigts* simply states:

¹To establish a *prima facie* case of obviousness, three basic criteria must be met.

- a. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
- b. Second, there must be a reasonable expectation of success.
- c. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

In operation, the antenna 102 receives an electromagnetic noise signal produced by an arc. The signal passes through the filter formed by the resistor 106 and the capacitor 108 to the input line 114 of the single shot timer 112. In response to the signal, the single shot timer 112 outputs a pulse on the output line 116 for a predetermined amount of time. The pulse on the output line 116 turns the transistor 120 on so that current flows through the transistor 120 and the solenoid coil 124, thus causing the solenoid coil 124 to operate as an electromagnet that opens the solenoid switch 126 and disconnects the power supply line 128. **When the predetermined amount of time expires, the single shot timer 112 stops outputting the pulse, the transistor 120 turns off, and the solenoid switch 126 closes to reconnect the power supply line 128.** The diode 122 provides a path for receiving current produced when the magnetic field generated by the solenoid coil collapses after the transistor 120 is turned off. *See* col. 3, lines 32-49 9 (Emphasis Added).

In other words, the threshold established for the system of *Voigts* is based on passage of a predetermined amount of time, and *not* on a current threshold based on an airflow setting.

Haun does not provide the disclosure missing from *Voigts*. As stated in the Office Action, *Haun* simply discloses an arc fault detection system that increments a count each time a monitored current value reaches a threshold. However, the threshold of *Haun* is simply a current or count threshold and not a current threshold based on an airflow setting as recited in claim 27.

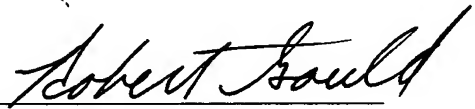
Because neither *Voigts* nor *Haun* discloses, or even suggests, a method or apparatus that establishes a current threshold based on an airflow setting, no modification or combination of these references would yield the invention recited in claim 27. Because the basic criteria necessary to establish a *prima facie* case of obviousness have not been satisfied, neither *Voigts* nor *Haun* render claim 27 obvious. Thus, the pending obviousness rejections must be withdrawal.

III. CONCLUSION

In light of the foregoing comments, Applicants assert that the application is in condition for allowance, or at the very least in better condition for appeal. Thus, Applicants request consideration of these comments and remarks and issuance of a Notice of Allowance of claims 1 to 22 and 24 to 42. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting prosecution of this application.

Respectfully submitted,

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